## Listing of Claims

1.    (Currently Amended) A method for adjusting an output level of audio data to be reproduced, comprising:

searching a recording medium for an audio file requested to be played, said recording medium storing a plurality of audio files;

temporarily storing audio data to be reproduced of the searched audio file and detecting an output level of the temporarily stored audio data; and

adjusting a gain of an audio output amplifier on the basis of the detected output level to output said adjusted audio data to be reproduced, wherein the temporarily stored audio data includes scale factors of sub-bands of audio frames of the audio file, the scale factors used to obtain the output level of the temporarily stored audio data as an indication of an average volume of the audio file, the gain of the audio amplifier adjusted to cause the average volume to correspond to a volume level set by a user.

2.    (Previously Presented) The method of claim 1, wherein the recording medium is adapted to store audio files of various types.

3.    (Previously Presented) The method of claim 2, wherein the audio data to be reproduced is data into which the searched audio file is converted by an audio codec corresponding thereto, and wherein the recording medium is adapted to store at least one of an MP3 audio file, MPEG2 audio file and AC3 audio file.

2

4.      (Previously Presented) The method of claim 1, wherein the detected output level is a peak level or average level of the temporarily stored audio data.


5.      (Previously Presented) The method of claim 4, wherein said detected output level is determined by sampling a reduced subset of the temporarily stored audio data.


6.      (Previously Presented) The method of claim 1, wherein the temporarily storing comprises:

reading the searched audio file from the recording medium and converting it into the audio data to be reproduced;

temporarily storing audio data of an amount corresponding to a predetermined period of time or a predetermined capacity, among the converted audio data, under the condition that the converted audio data is not amplified and outputted; and

detecting the output level of the temporarily stored audio data.


7.      (Currently Amended) The method of claim 6, wherein the adjusting comprises:

comparing the detected output level with a predetermined reference level;

increasing the gain of the audio output amplifier when the detected output level is determined to be lower than the reference level as a result of the comparison and reducing the gain when the detected output level is determined to be higher than the reference level; and

amplifying the audio data to be reproduced, at the adjusted gain, to output the adjusted audio data at the reference level, wherein the predetermined reference level corresponds to the volume level set by the user.

8.      (Currently Amended) The method of claim 1, wherein the adjusting comprises:

comparing the detected output level with a predetermined reference level;

increasing the gain of said audio output amplifier when the detected output level is determined to be lower than the reference level as a result of the comparison and reducing the gain when the detected output level is determined to be higher than the reference level; and

amplifying the audio data to be reproduced, at the adjusted gain, to output the adjusted audio data at the reference level, wherein the predetermined reference level corresponds to the volume level set by the user.

9.      (Previously Presented) The method of claim 1, wherein the detecting and adjusting are performed on an audio file basis.

10.     (Currently Amended) A machine-readable storage medium containing instructions for adjusting an output level of audio data to be reproduced, said instructions, when executed in a digital audio system, causing the system to:

search a recording medium for an audio file requested to be played, the recording medium storing audio files of various types;

temporarily store audio data to be reproduced of the searched audio file and detect an output level of the temporarily stored audio data; and

adjust a gain of an audio output amplifier on the basis of the detected output level to output the audio data to be reproduced at a prescribed level, wherein the temporarily stored audio data includes scale factors of sub-bands of audio frames of the audio file, the scale factors used to obtain the output level of the temporarily stored audio data as an indication of an average volume of the audio file, the gain of the audio amplifier adjusted to cause the average volume to correspond to a volume level set by a user.

11.     (Previously Presented) The article of claim 10, wherein the recording medium is adapted to store at least one of an MP3 audio file, MPEG2 audio file and AC3 audio file, and wherein the audio data to be reproduced is data into which the searched audio file is converted by an audio codec corresponding thereto.

12.     (Previously Presented) The article of claim 10, wherein the detected output level is a peak level or average level of the temporarily stored audio data.

13.     (Previously Presented) The article of claim 12, wherein the peak level or the average level is determined by sampling a reduced subset of the temporarily stored audio data.

14.    (Previously Presented) The article of claim 10, wherein the storage medium contains instructions for causing the system to:

read the searched audio file from the recording medium and convert it into the audio data to be reproduced;

temporarily store audio data of an amount corresponding to a predetermined period of time or a predetermined capacity, among the converted audio data, under the condition that the converted audio data is not amplified and outputted; and

detect the output level of the temporarily stored audio data.

15.    (Currently Amended) The article of claim 10, wherein the storage medium contains instructions for causing the system to:

compare the detected output level with a predetermined reference level;

increase the gain of the audio output amplifier when the detected output level is determined to be lower than the reference level as a result of the comparison and reduce the gain when the detected output level is determined to be higher than the reference level;

first amplify the audio data to be reproduced, at the adjusted gain, to output it at the reference level; and

second amplify the first amplified audio data to be reproduced according to a user selected output level of the audio file to be played, wherein the predetermined reference level corresponds to the volume level set by the user.

16.    (Currently Amended) A digital audio system, comprising:

a reading device configured to read an audio file requested to be played from a recording medium, the recording medium storing audio files of various types;

a converter configured to convert the read audio file into audio data to be reproduced;

a storage device configured to temporarily store the audio data to be reproduced;

a detector configured to detect an output level of the temporarily stored audio data;

an audio amplifier configured to amplify and output the audio data to be reproduced; and

a controller configured to control the reading device to search the recording medium for the audio file requested to be played and read the searched audio file from said recording medium, coupled to said storage device and detector, and for adjusting a gain of the audio amplifier on the basis of the detected output level,

wherein the temporarily stored audio data includes scale factors of sub-bands of audio frames of the audio file, the scale factors used to obtain the output level, and

7

wherein the detector is adapted to detect a peak level or average level of said temporarily stored audio data, wherein the peak level or average level of the sub-bands, which are used to determine the peak level or the average level of the audio file, is obtained by accumulatively adding only sampled ones of the scale factors.

17.    (Previously Presented) The system of claim 16, wherein the digital audio system is one of a portable terminal, a portable computer, and a personal computer having a playback function for the audio files, wherein the recording medium is adapted to store at least one of an MP3 audio file, MPEG2 audio file and AC3 audio file.

18.    (Previously Presented) The system of claim 16, wherein the storage device is adapted to temporarily store audio data of an amount corresponding to a predetermined period of time or a predetermined capacity, among the converted audio data, under the condition that the converted audio data is not amplified and outputted by the audio amplifier.

19.    (Canceled)

20.    (Canceled)

21.     (Previously Presented) The system of claim 16, wherein the detector is adapted to detect the output level of the temporarily stored audio data by sampling a reduced subset of the temporarily stored audio data.

22.     (Previously Presented) The system of claim 16, wherein the controller is adapted to increase the gain of the audio amplifier means when the detected output level is lower than a predetermined reference level and reduce the gain when the detected output level is higher than the reference level to output the audio data to be reproduced, at the reference level.

23.     (Previously Presented) The system of claim 16, wherein the controller is adapted to, on an audio file basis, control the storage device to temporarily store the audio data to be reproduced, control the detector to detect the output level of the temporarily stored audio data, and adjust the gain of the audio amplifier responsive to detected output level and a selected output level of the audio file requested to be played.

24-29. (Canceled)

30.     (New) The method of claim 1, wherein the output level is detected based on a peak level or average level obtained for said temporarily stored audio data, the peak level or average level obtained by accumulatively adding only sampled ones of the scale factors corresponding to respective ones of the sub-bands.

31.     (New) The article of claim 10, wherein the output level is detected based on a peak level or average level obtained for said temporarily stored audio data, the peak level or average level obtained by accumulatively adding only sampled ones of the scale factors corresponding to respective ones of the sub-bands.